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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,120

05/16/2005

Andrea Karen Bennett

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EXAMINER

PUTTLITZ, KARL J

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

05/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,120	Applicant(s) BENNETT ET AL.	
	Examiner KARL J. PUTTLITZ	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/3/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 and 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the term “neutralized” refers to: purity, pH, etc. In this connection it is unclear how a composition can be more than 100% neutralized. It is also unclear how a portion of a composition of acrylic acid can be neutralized (i.e., less than 100%).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,728,872 (US 872) or Cutie et al., Journal of Applied Polymer Science (1997), 64(3), 577-589 (Cutie) or “Acrylic Acid and Derivatives” in Kirk Othmer Encyclopedia of Chemical Technology, John Wiley & Sons, Inc., pp. 342-369 (Kirk Othmer); in view of U.S. Patent No. 4,375,558 (US 558) and Zogorski et

al., Journal of Colloid and Interface Science (1976), 55(2), 329-41 (Zogorski) and WO199801415, as evidenced by U.S. Patent No. 6,596,901 (US 901) and JP 8310979 (JP 979).

The claims cover, inter alia, a process for reducing a concentration of MEHQ in acrylic acid which has been from 75% to 105% neutralized, by a continuous adsorption on activated carbon.

The claims also cover a process for preparing a superabsorbent comprising a step of optionally combining 75% to 105% neutralized acrylic acid whose MEHQ content has been reduced by continuous adsorption on activated carbon with a less neutralized acrylic acid subsequently polymerizing the acrylic acid, and optionally surface postcrosslinking the resulting superabsorbent.

With regard to the above embodiments, it is known that MEHQ is used in the preparation (e.g. purification by distillation) of acrylic acid, see abstract of US 872 and Cutie, see also p. 362 of Kirk Othmer. While these reference fail to explicitly teach that MEHQ can be removed from acrylic acid preparations by activated carbon, it is for this proposition that the examiner joins US 558 and Zogorski, which teach that MEHQ can be effectively removed from product compositions by activated carbon, see for example, column 1, lines 49 of US 558. In this connection a person of ordinary skill has a good reason to pursue the known options within his or her technical grasp, such as using activated carbon to remove MEHQ since it would have led to the anticipated success, and therefore the addition of activated carbon to remove MEHQ is likely not the product of innovation, but of ordinary skill and common sense.

Moreover, the prior art discusses the desirability to remove MEHQ from acrylic acid compositions, see discussion in Kirk Othmer of removing phenolic compounds to prepare superabsorbent acrylates at page 362, see also US 901 at column 1, lines 6+. Also, the prior art contained a known technique that is applicable to the removal of MEHQ, see US 558 and Zogorski. In particular, JP 979 specifically teaches that hydroxylated polymerization inhibitors can be isolated with activated carbon, see page 2, right column. In this regard, there is no reason to believe that applying the removal of MEHQ via activated carbon would not have yielded predictable results. In this regard, applying known technique for removing MEHQ to a known acrylic acid product would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Kirk Othmer.

Kirk Othmer discusses superabsorbents prepared from acrylic acid/acrylate monomers, see MPEP 2113 (“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the

product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached at telephone number (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Karl J. Puttlitz/

Application/Control Number: 10/535,120
Art Unit: 1621

Page 6

Primary Examiner, Art Unit 1621